

AMENDMENT

Serial Number: 10/760,965

Filing Date: January 20, 2004

Title: System and Method for Joint Resurface Repair

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STD00.01CIP2CON

REMARKS

The Notice of Non-Compliant Amendment mailed November 12, 2008 and the Official Action mailed June 27, 2008 has been carefully considered. Reconsideration and allowance of the subject application, as amended, are respectfully requested.

Notice of Non-Compliant Amendment

The Notice of Non-Compliant Amendment dated November 12, 2008 has been carefully considered. The amendment filed September 29, 2008 was deemed non-compliant because the listing of claims did not include the text of all pending claims (including withdrawn claims). With this amendment, Applicant has presented the complete listing of all claims. As such, the present amendment now satisfies the complete listing of all the claims requirement.

Claim to Related Applications

Applicant notes that the published application states that the instant application is a "continuation in part of application No. 10/162,533, filed on Jan. 4, 2002, now Pat. No. 6,679,917... ." In addition, the first paragraph of the published application states that the instant application is a "continuation in part of application No. 10/024,077, filed on Dec. 17, 2001... ." Applicant notes that neither of these are correct.

Upon filing of the instant application, Applicant filed a preliminary amendment canceling lines 2-5 of page 1 and entering the following paragraph:

--This application is a continuation application under 37 CFR §1.53(b) of US application serial No. 10/162,533 filed June 4, 2002, now US Patent No. 6,679,917, which is a continuation-in-part application of application Serial No. 10/024,077, filed December 17, 2001, which is itself a CIP application of application Serial No. 09/846,657, filed May 1, 2001, which claims priority from U.S. provisional application Serial No. 60/201,049, filed May 1, 2000, all of which are incorporated herein for reference.--

Accordingly, Applicant respectfully requests that the proper priority of the instant application be acknowledged and corrected.

Claim Rejection – 35 U.S.C. § 112

Claims 69-73 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicant strongly disagrees with this rejection. The following remarks will provide support for each limitation recited in independent claim 69. Applicant submits that while specific portions of the application will be discussed, it should be understood that this is merely for illustrative purposes only. Support for the various limitations may be found throughout the application, and independent claim 69 should not be limited to only this cited portions.

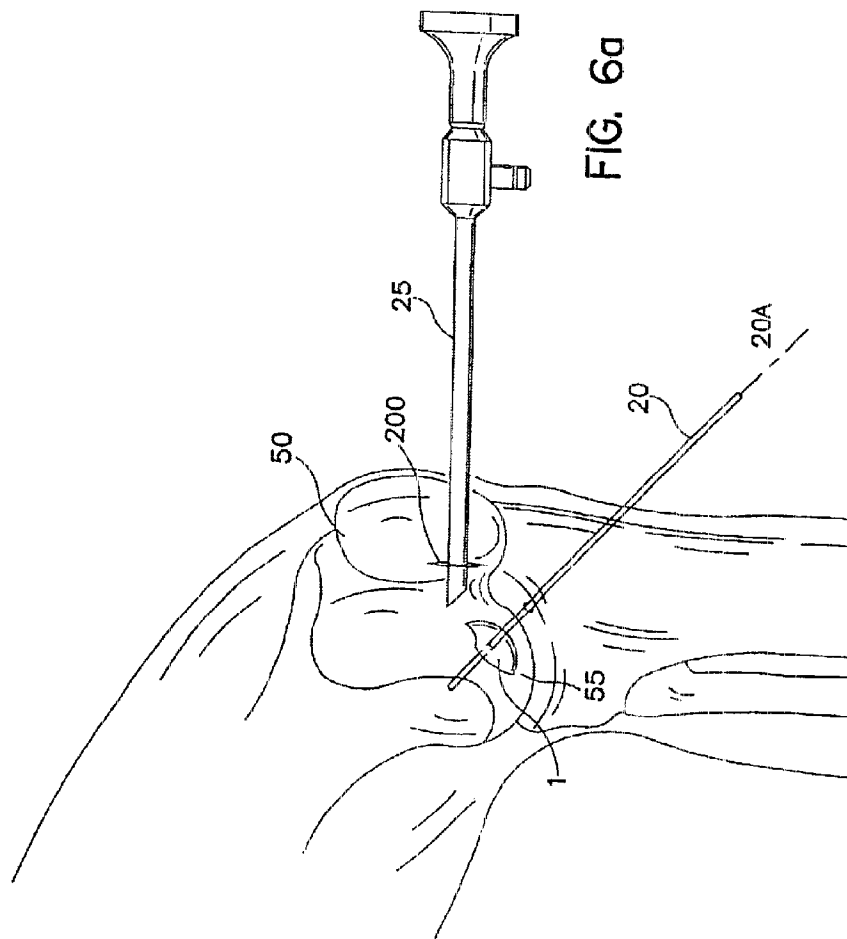
Independent claim 69 is reproduced below for the Examiner's convenience.

69. A method of mapping a surface contour of an articular surface comprising:
establishing a working axis extending from said articular surface;
providing a first probe having a first diameter;
measuring a first distance between at least a first point of said articular surface and a first plane substantially normal to said working axis at a distance substantially equal to said first diameter of said first probe from said working axis;
providing a second probe having a second diameter; and
measuring a second distance between at least a second point of said articular surface and a second plane substantially normal to said working axis at a distance substantially equal to said second diameter of said second probe from said working axis.

Independent claim 69 is therefore directed to a method for mapping a surface contour of an articular surface. Support for all of the limitations of independent claim 69 will be discussed below.

Independent claim 69 recites, *inter alia*, “establishing a working axis extending from said articular surface.” Support for this limitation may be found, for example, in paragraphs [0161] and [0219]-[0221] as well as FIG. 6a and FIGS. 49-53. A copy of paragraph [0161] and FIG. 6a is reproduced below.

[0161] “The disclosed surgical intervention begins by drilling a guide pin 20 [FIG. 6a] defining reference axis 20A into the central portion of the defect 1 via an incision 200 typical of arthroscopic procedures. ...This reference axis 20A serves to establish a working axis located central to the defect 1 for the procedures that follow, and arthroscope 25 may be used to view the joint for purposes of establishing a reference axis 20A generally perpendicular to and bisecting the existing articular surface 55 defined by radii 60 and 61, as shown in FIG. 8b.”

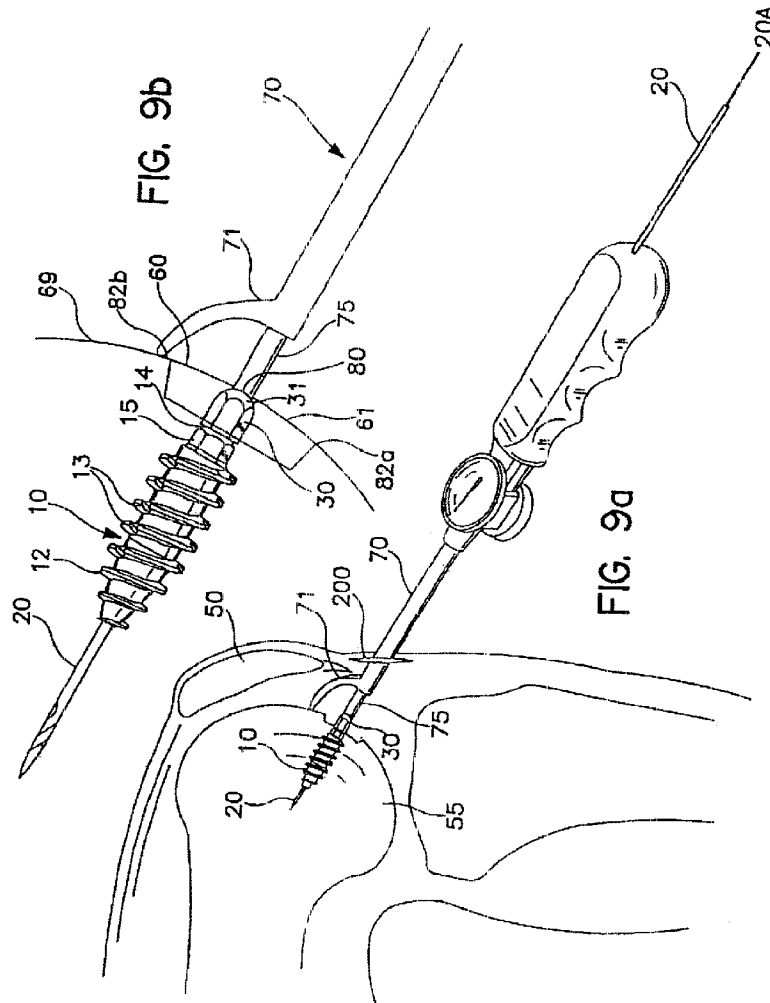


Accordingly, Applicant respectfully submits that there is support for “establishing a working axis extending from said articular surface” as recited in independent claim 69.

Independent claim 69 also recites, *inter alia*, “providing a first probe having a first diameter” and “providing a second probe having a second diameter.” Support for both of these limitations may be found throughout the application. In particular, the specification of the present application clearly teaches several probes/measuring devices. For example, one or more of the first and the second probes may include: measuring device 70, FIGS. 9a-9b; measuring device 210, FIGS. 20a-20i; or measuring system 810 FIGS. 54-61.

By way of example only, one possible embodiment of a probe consistent with independent claim 69 may include a measuring device 70 comprising an outrigger 71 (see, for example, FIGS. 9a-9b, reproduced below) extending outwardly a distance from a shaft which defines the diameter of the probe. It is important to note that none of the drawings indicate a

specific diameter, and as such, none of the drawings are limited to a specific value for the diameter.



In addition, paragraph [0245] of the published application states:

[0245] When articular surface mapping is done using one axis normal to the surface of the implant, **two measuring probes may be utilized.** One measuring probe may be utilized to map the points for the AP curve and another smaller diameter measuring probe may be utilized to map the points for the ML curve so as it is revolved its captures the data for points M and L. The implant 6500 may be defined by the ML curve swept along the AP curve as previously described herein.

Accordingly, the above paragraph clearly teaches that the method may include a first and a second probe, and that the second probe may have a diameter which is smaller than the first

probe. The above paragraph also clearly teaches that the first and second probes may be used with the axis normal to the surface.

As such, in light of the teachings of paragraph [0245] which clearly teaches that the second probe may have a diameter which is smaller than the first probe, Applicant respectfully submits that one of ordinary skill in the art would understand the drawings to illustrate a first and a second probe having each having a diameter as generally recited in independent claim 69 without the need of a drawing showing two probes side-by-side with different diameters. Accordingly, Applicant respectfully submits that there is support for “providing a first probe having a first diameter” and “providing a second probe having a second diameter” as recited in independent claim 69.

Independent claim 69 further specifies “measuring a first distance between at least a first point of said articular surface and a first plane substantially normal to said working axis at a distance substantially equal to said first diameter of said first probe from said working axis.”

Using a probe (e.g., measuring device 70 discussed above), a distance (e.g. measurement) may be taken along the Z axis. For example, paragraph [0167] of the published application teaches:

[0167] Turning now to FIGS. 9a and 9b, with the guide pin 20 replaced, a measuring tool 70 is inserted so that the reference axis 20A is utilized. ... By rotating the outer arm or outrigger 71 of the measuring tool 70 relative to the static post 75 while also maintaining contact with the articular surface 55, **an axial displacement or Z dimension** can be established relative to the point of origin 80 for any point along the sweep of the outrigger. Each such Z dimension may be recorded in real time with conventional dial gauge indicators 72 or with a digital recording device

In addition, paragraph [0170] of the published application teaches:

[0170] For example, as shown in FIGS. 8b and 9b, to accurately reproduce the two radii 60 and 61 that locally define the articular surface 55, four points, 81a and 81b, and 82a and 82b, and the point of origin 80 are recorded. **As any three points in a single plane define a curve, by recording points 81a and 81b and the point of origin 80, radius 60 defining the medial-lateral aspect 68 of the chondyle can be determined.**

and paragraph [0174] of the published application teaches:

[0174] ...In FIG. 20f, the outrigger 324 is retracted, and outer shaft 333 is located at a position of origin along a z-axis parallel to the inner 330 and outer 333 shafts, such that the proximal end of the ring 320 is located at position 335. In FIG. 20g, the outrigger 324 is extended, and outer shaft 333 is located at a position 0.250 in. (0.64 cm.) from the origin of the z-axis parallel to the inner 330 and outer 333 shafts, such that the proximal end of the ring 320 is located at position 335'. ... Thus, as the user rotates outrigger 324 by rotation of rotating portion 322, the outrigger moves along the articular surface proximally or distally with respect to the inner shaft, and the displacement of the outrigger 324 along a z-axis parallel to the inner 330 and outer 333 shafts may be marked on the scroll 317 by depression of the button 323 at various points along the rotation of the outrigger 324.

Based on at least the above passages of the present application, Applicants respectfully submits that one of ordinary skill in the art would readily understand the present application to teach “measuring a first distance between at least a first point of said articular surface and a first plane substantially normal to said working axis at a distance substantially equal to said first diameter of said first probe from said working axis.”

For example, paragraphs [0167] and [0174] recited above clearly teach measuring/obtaining a Z dimension or displacement along the Z-axis. Applicant respectfully submits that one of ordinary skill in the art would readily understand that the Z-axis discussed in the present application is a Z-axis of a three-dimensional (X, Y, Z) Cartesian system. Since the present application clearly teaches that the working axis is normal to the patient's articular surface and that it is this axis along which the Z-dimensions/displacements are being measured/obtained, Applicant further submits that one of ordinary skill in the art would readily understand that the X and Y axis in the Cartesian system would define a plane normal to the working axis (Z-axis). Accordingly, Applicant respectfully submits that one of ordinary skill in the art would readily understand the present application to teach “measuring a first distance between at least a first point of said articular surface and a first plane substantially normal to said working axis at a distance substantially equal to said first diameter of said first probe from said working axis” as generally recited in independent claim 69.

Independent claim 69 also recites, *inter alia*, “measuring a second distance between at least a second point of said articular surface and a second plane substantially normal to said working axis at a distance substantially equal to said second diameter of said second probe from

said working axis.” As discussed above, one of ordinary skill in the art would readily understand the present application to teach measuring/obtaining a Z-dimension/distance along the Z axis. Moreover, as discussed above, paragraph [0245] clearly teaches mapping an articular surface using two probes, wherein one probe may have a diameter that is smaller than the other probe. Accordingly, Applicant respectfully submits that one of ordinary skill in the art would readily understand the present application to teach “measuring a second distance between at least a second point of said articular surface and a second plane substantially normal to said working axis at a distance substantially equal to said second diameter of said second probe from said working axis” as generally recited in independent claim 69.

Based on at least the above passages of the present application, Applicant respectfully submits that one of ordinary skill in the art would readily understand the present application to teach all of the limitation recited in independent claim 69. It is important to note that the limitations recited in the claims do not need to “be described literally (i.e., using the same terms or *in haec verba*) in order for the disclosure to satisfy the description requirement.” (*See MPEP* § 2163.02.). Accordingly, Applicant respectfully requests that the rejection to the pending claims under 35 U.S.C. § 112, first paragraph, should be withdrawn.

Objection - Drawings

The Examiner has objected to the drawings as not showing every feature of the invention specified in the claims. Applicant respectfully traverses this rejection.

35 U.S.C. § 113 states, *inter alia*, that “[t]he applicant shall furnish a drawing where necessary for the understanding of the subject matter to be patented.” Similarly, 37 C.F.R. § 1.81(a) states, *inter alia*, “[t]he applicant for a patent is required to furnish a drawing of his or her invention where necessary for the understanding of the subject matter sought to be patented.”

As discussed above, the present application provides numerous drawings showing probes/measuring devices consistent with independent claim 69. None of these drawings are limited to a specific diameter. Moreover, paragraph [0245] of the present application clearly teaches that two probes may be used to obtain measurements. Applicant respectfully submits that one of ordinary skill in the art would not need a drawing showing two probes, side-by-side,

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as generally suggested by the present Office Action in order to understand the subject matter to be patented. Accordingly, Applicant respectfully requests that the objection to the drawing should be withdrawn.

Having dealt with all the objections raised by the Examiner, it is respectfully submitted that the present application, as amended, is in condition for allowance. Thus, early allowance is earnestly solicited.

If the Examiner desires personal contact for further disposition of this case, the Examiner is invited to call the undersigned Attorney at 603.668.6560.

In the event there are any fees due, please charge them to our Deposit Account No. 50-2121.

Respectfully submitted,

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